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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,754	02/11/2004	Lukas Eisermann	31132.227	3616

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EXAMINER

SCHILLINGER, ANN M

ART UNIT PAPER NUMBER

3738

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/776,754	Applicant(s) EISERMANN, LUKAS	
	Examiner Ann Schillinger	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/9/04, 8/23/04, 9/16/04</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "...a portion of a spinal column 10, illustrating a pair of adjacent upper and lower vertebrae..." (paragraph 0018). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10, and 13-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ferree (U.S. Pat. No. 6,432,107). Ferree discloses the following regarding claim 1: a fusion-promoting prosthetic device for insertion into an intervertebral space, comprising a sagittally-extending plate (420) having caudal (bottom portion of 420) and cephalad (top portion of 420) edges, the caudal edge being adapted for complete insertion within a first vertebral body (208) and the cephalad edge being adapted for complete insertion within a second vertebral body adjacent to the first vertebral body (210), a first transverse plate (left element 440) connected to the sagittally-extending plate, and a second transverse plate (right element 440) connected to the sagittally-extending plate, the first and second transverse plates being adapted for complete insertion within the intervertebral space (Figures 4D, 2A).

Ferree discloses the bearing surfaces on the first and the second transverse plates of claims 2 and 3 in col. 3, lines 43-45, and in Figure 3C where the teeth are shown on both plates.

Ferree discloses the following regarding claim 4: the prosthetic device of claim 1 wherein the sagittally-extending plate further comprises a plurality of openings (202) extending therethrough (Figure 2A).

Ferree discloses the following regarding claim 5: the prosthetic device of claim 1 wherein each of the first and second transverse plates comprises a plurality of openings (220) extending therethrough (Figure 2A).

Ferree discloses claims 6 and 7 that are coating the sagittally-extending plate and the two transverse plates with a bone-growth promoting substance in col. 4, lines 12-15. Here, Ferree

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says the device is coated with the bone-growth promoting substance, which the Examiner is interpreting to mean both the transverse and sagittal parts of Ferree's disclosed implant.

Ferree discloses the following regarding claim 8: the prosthetic device of claim 1 wherein the first transverse plate is angled relative to the sagittally-extending plate (as shown in Figures 3C and 4D, left element 440 will be at a right angle to the sagittally-extending plate, 420).

Ferree discloses the following regarding claim 10: the prosthetic device of claim 1 wherein the first and second transverse plates each extend at a substantially right angle to the sagittally-extending plate (as shown in Figure 4D).

Ferree discloses the following regarding claim 13: a fusion-promoting, spinal plating assembly, comprising a first plate (420) adapted to engage a first vertebral body (208) and a second vertebral body (210), and at least one additional plate connected to the first plate (right element 440), the at least one additional plate extending transversely to the first plate, wherein the at least one additional plate is adapted to be inserted within an intervertebral space (shown in Figures 4D, 2A).

Ferree discloses the following regarding claim 14: the plating assembly of claim 13 wherein the at least one additional plate is integrally formed with the first plate (Figure 3C; col. 3, lines 66-67 to col. 4, lines 1-2).

Ferree discloses the following regarding claim 15: the plating assembly of claim 13 wherein the at least one additional plate is removably connected to the first plate (Figure 4D; col. 4, lines 29-33).

Ferree discloses the following regarding claim 16: the plating assembly of claim 13 wherein the at least one additional plate extends at an angle relative to the first plate (as shown in Figures 3C and 4D, right element 440 will be at a right angle to the first plate, 420).

Ferree discloses the following regarding claim 17: the plating assembly of claim 13 wherein the first plate (420) is adapted to be impacted into each of the first and second vertebral bodies. The element 420 is shown inserted into the gaps 204 and 206 of the first and second vertebral bodies, respectively (Figures 2A, 4D).

Ferree discloses the following regarding claim 18: the plating assembly of claim 13 wherein the first plate is adapted to be inserted into a preformed opening in each of the first and second vertebral bodies (col. 3, lines 23-27).

Ferree discloses the following regarding claim 19: a method for promoting fusion in an intervertebral space defined between first and second vertebral bodies, comprising: providing a prosthetic device having a first plate (420) adapted to engage each of the first (208) and second (210) vertebral bodies, and a pair of additional plates connected to the first plate (right and left 440 elements), the additional pair of plates extending in a direction transverse to the first plate (as shown in Figure 4D); and inserting the prosthetic device into the intervertebral space such that a first edge of the first plate is completely inserted within the first vertebral body (top portion of 420 in 208), a second edge of the first plate is completely inserted within the second vertebral body (bottom portion of 420 in 210), and each of the additional pair of plates are completely disposed within the intervertebral space (Figure 2A, 4D; col. 3, lines 30-39).

Ferree discloses the following regarding claim 20: the method of claim 19 further comprising inserting bone grafts into the intervertebral space (col. 2, lines 7-11).

Ferree discloses the following regarding claim 21: the method of claim 19 wherein inserting the prosthetic device comprises impacting the first and second edges of the first plate (top and bottom edges of 420) into the first (208) and second (210) vertebral bodies, respectively (Figure 4D; col. 3, lines 23-27).

Ferree discloses the following regarding claim 22: the method of claim 19 wherein inserting the prosthetic device comprises forming openings (204, 206) in each of the first (208) and second (210) vertebral bodies and inserting the first and second edges of the first plate into the preformed openings of the first and second vertebral bodies, respectively (top and bottom edges of 420) (Figure 4D; col. 3, lines 23-27).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferree in view of Jackson (U.S. Pub. No. 2002/0116065). Ferree does not disclose altering the angles of the sagittal and transverse plates to a measurement other than 90° to allow the implant

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to better fit into the intervertebral space. However, Jackson discloses this technique in his intervertebral implant.

Jackson discloses the following regarding claim 9: the prosthetic device of claim 8 wherein the second transverse plate is angled relative to the sagittally-extending plate, the angulation of the first and second transverse plates corresponding to an angular relationship defined between the first and second vertebral bodies (paragraph 0070).

Jackson discloses the following regarding claim 11: the prosthetic device of claim 1 wherein the caudal edge is beveled at a posterior portion thereof (bottom of element 11 is not at a right angle with the vertebrae in Figure 8).

Jackson discloses the following regarding claim 12: the prosthetic device of claim 1 wherein the cephalad edge is beveled at a posterior portion thereof (top of element 11 is not at a right angle with the vertebrae in Figure 8).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to alter the transverse and/or sagittal plates of the implant so that it can fit into the desired intervertebral space.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Schillinger whose telephone number is (571) 272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571)272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ann Schillinger  
August 29, 2006



**ALVIN J. STEWART**  
**PRIMARY EXAMINER**